

What is claimed is:

1. A fluoropolymer comprising less than 0.05 ppm extractable metal ions.

2. A fluoropolymer comprising less than 0.5 ppm extractable fluoride ions and less
5 than 0.02 ppm heavy metals.

3. A fluorothermoplastic polymer according to claim 1 containing less than 30
unstable end groups per 10^6 carbon atoms.

10 4. A fluorothermoplastic polymer according to claim 3 containing less than 0.02
ppm extractable ions.

5. A fluoropolymer according to claim 1 wherein the extractable ions comprise ions
selected from the group consisting of iron, chrome, nickel and vanadium.

15 6. A fluorothermoplastic polymer according to claim 3 wherein the unstable end
groups comprise end groups selected from the list consisting of $-\text{COOH}$, $-\text{COF}$ and $-\text{CONH}_2$.

20 7. Articles for use in the semi-conductor industry comprising a fluoropolymer
according to claim 1.